

REMARKS

The Examiner is thanked for the thorough review and consideration of the present application. The non-final Office Action dated February 20, 2004 has been received and its contents carefully reviewed.

By this Response, Applicants have amended claims 1 and 15, and cancelled claim 14 without prejudice or disclaimer of the subject matter recited therein. No new matter has been added. Claims 1-20 are pending in the application. Applicants kindly acknowledge the allowable subject matter in claim 13. However, claim 13 has not been amended to independent form at this time to permit the Examiner to reconsider the rejections in view of the remarks presented below. Reconsideration and withdrawal of the rejections in view of the above amendments and the following remarks are requested.

In the Office Action, claims 1-20 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants thank the Examiner for the suggested amendment and have amended claim 1 accordingly. Applicants respectfully note that by this amendment, the present invention may not be considered limited to the specific embodiment of connecting only one electrostatic discharge device. Based upon the amendment to claim 1, Applicants request the rejection of claim 1 and its dependent claims 2-20 be withdrawn.

In the Office Action, claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,108,057, issued to Kusanagi in view of the admitted prior art (APA). Applicants traverse the rejection because neither Kusanagi nor the APA, analyzed alone or in any combination, teaches or suggests the combined features recited in the claim 1 of the present application. For example, Kusanagi and the APA fail to teach or suggest an in-plane switching liquid crystal display device that includes, among other features, “a plurality of first connecting lines in the non-display region, each first connecting line connecting a pixel to one of the electrostatic discharge devices; and a plurality of second connecting lines in the non-display region, wherein one of the electrostatic discharge devices is located between one of the first connecting lines and one of the second connecting lines,” as recited in independent claim 1.

The Office Action concedes that Kusanagi fails to teach or suggest an “electric field formed between the first and second electrodes substantially parallel to the substrate when a voltage is applied to the first and second electrodes,” and relies upon the Related Art depicted in

FIG. 4 to teach an in-plane switching device. Applicants respectfully submit FIG. 4 of the present application fails to remedy the deficient teachings of Kusanagi. Accordingly, claim 1 is allowable over any combination of Kusanagi and the subject matter depicted in FIG. 4 of the present application. Reconsideration and withdrawal of the rejection are requested.

In the Office Action, claims 1-10, 12 and 14-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,926,234, issued to Shiraki et al. (hereafter "Shiraki") in view of the admitted prior art ("APA"). Applicants have cancelled claim 14. Thus, the rejection as applied to cancelled claim 14 is rendered moot. Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Shiraki in view of the APA and further in view of U.S. Patent No. 5,889,568, issued to Seraphim et al. (hereafter "Seraphim"). Applicants traverse the rejections because no combination of Shiraki, the APA, nor Seraphim, teaches or suggests the combined features recited in the claims of the present application. For example, Shiraki, the APA and Seraphim fail to teach or suggest an in-plane switching liquid crystal display device that includes, among other features, "a plurality of first connecting lines in the non-display region, each first connecting line connecting a pixel to one of the electrostatic discharge devices; and a plurality of second connecting lines in the non-display region, wherein one of the electrostatic discharge devices is located between one of the first connecting lines and one of the second connecting lines," as recited in independent claim 1".

The Office Action concedes that Shiraki fails to teach an liquid crystal display device having "an electric field formed between the first and second electrodes substantially parallel to the substrate when a voltage is applied to the first and second electrodes." To compensate for the deficient teachings of Shiraki, the Office Action relies upon FIG. 4 of the Related Art. Based upon a combination of Shiraki and the teachings of FIG. 4, the Office Action alleges that it would have been obvious to the ordinary artisan to modify the device of Shiraki to obtain an in-plane switching liquid crystal display device having the combined features recited in the claims of the present application. Applicants respectfully disagree because Shiraki and the APA fail to teach or suggest a plurality of first connecting lines in the non-display region, each first connecting line connecting a pixel to one of the electrostatic discharge devices; and a plurality of second connecting lines in the non-display region, wherein one of the electrostatic discharge devices is located between one of the first connecting lines and one of the second connecting lines," as recited in independent claim 1. Because Shiraki and the APA fail to teach or suggest

at least these features of claim 1, claim 1 and its dependent claims 2-10, 12 and 15-20 are allowable over any combination of Shiraki and the APA. Reconsideration and withdrawal of the rejection are requested.

With regard to the rejection of dependent claim 11, the Office Action concedes Shiraki and the APA fail to teach or suggest “one pixel pitch is between about 1 mm to about 1.5 mm”, as recited in claim 11. To compensate for this deficiency, the Office Action relies upon Seraphim. Based upon the teachings of Seraphim, the Office Action alleges it would have been obvious to modify the device of Shiraki to obtain an in-plane switching liquid crystal display device having the features recited in the claims of the present application. Applicants respectfully disagree.

Seraphim relates to a method for making tiled displays for use in large area panel displays, and more particularly to a technique for producing and assembling such small display tiles into a large are display and selectively electrically interconnecting the tiles while at the same time mechanically positioning them to meet the desired optical specifications” (col. 2, lines 20-27). Because the problems solved in Seraphim relate to the manufacture of large panel displays, and not to problems caused by electrostatic discharge in an in-plane switching device, one of ordinary skill seeking to solve such problems would not be motivated to modify the device of Shiraki by the teachings of the APA and Seraphim to obtain an in-plane switching liquid crystal display device that controls electrostatic discharge, prevents an induced potential and defines a relationship of the electrostatic discharge devices such that “each electrostatic discharge device is at a distance of more than one pixel pitch from the pixels...wherein one pixel pitch is between about 1 mm to about 1.5 mm”, as recited in claims 1 and 11 of the present application. Accordingly, dependent claim 11 is allowable over any combination of Shiraki, the APA and Seraphim. Reconsideration and withdrawal of the rejection of claim 11 are requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned at (202) 496-7500.

Application No.: 10/025,862

Docket No.: 8733.567.00-US

Amendment dated May 20, 2004

Reply to non-final Office Action dated February 20, 2004

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: May 20, 2004

Respectfully submitted,

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